Connection

string portName;
int baudRate;
bool localComsEnabled;
bool partnerComsEnabled;

void connect();
bool sendMessage();
bool readMessage();
void listen();
void disableComs();
void enableComs();

DataDisplay

+WeaponStatus status;
Connection con;
+ Event latestEvent;
string portName;

updateGUI();

WeaponStatus

+ bool armed;
+ TriggerStatusType trigger1;
+ TriggerStatusType trigger2;
+ string controllerVersion;
+ string controllerCRC;
+ ControllerStateType state;
+ int baudRate;
+ int totalErrors;
+ int totalFiringEvents;
+ int totalEvents;
+ FiringModeType firingMode;
+ int feedPosition;
+ ElectricalComponent component;

+ string serializeStatus();
+ string deserializeStatus();

Controller

WeaponStatus status;
Connection con;
int weaponModel;
Event latestEvent;
bool comsEnabled;
double eventFrequency;

randomizeStatus();
randomizeEvents();

Event

string eventData;

string serializeEvent();
string deserializeEvent();

Error

bool cleared;

ElectricalComponent

+ int voltage;
+ int current;
+ ElectricalComponent *nextPtr;

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```
typedef enum { ENGAGED, DISENGAGED, NA } TriggerStatusType;
typedef enum { INITIALIZING, STANDBY, FIRING, WEAPON_ERROR, OFFLINE, CONTROLLER_ERROR } ControllerStateType;
typedef enum { SINGLE, AUTOMATIC, BURST, SAFE } FiringModeType;
```